

WHAT IS CLAIMED IS:

5 5A' 1. A color correction method of correcting image data prepared for a first apparatus having a first Gamut indicative of a range of reproducible colors so as to be applied to a second apparatus having a second Gamut indicative of a range of reproducible colors, said color correction method comprising the steps of:

10 entering image data prepared for said first apparatus, and  
shifting said entered image data by a conversion of shifting a gray axis of said first Gamut towards a gray axis of said second Gamut,  
wherein said image data is shifted according to an amount of shifting corresponding to a distance from the gray axis of said first Gamut in a chroma direction.

15 2. The color correction method according to claim 1, further comprising the steps of:

compressing the converted image data in directions of lightness and chroma so as to be applied to said second apparatus,

pasting image data that does not come into said second Gamut even by said compression step to a surface of said second Gamut, and

20 providing image data corrected through said pasting step outside.

3. The color correction method according to claim 1, wherein said amount of shifting becomes smaller in proportion to greater distance from the gray axis of said first Gamut in the chroma direction.

25 4. The color correction method according to claim 1, wherein said shifting step shifts said entered image data so that the gray axis of said first Gamut matches the gray axis of said second Gamut.

5. The color correction there according to claim 1, wherein said shifting step shifts said entered data so that the gray axis of said first Gamut is shifted to a position not completely matching the gray axis of said

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second Gamut.

5 6. The color correction method according to claim 1, wherein said shifting step shifts the gray axis of said first apparatus by the amount of shifting in a ratio of 0.5 to 0.9 with respect to the amount of shifting when the gray axis of said first Gamut matches the gray axis of said second Gamut.

7. The color correction method according to claim 1, wherein said shifting step sets a white point of said first Gamut to coincide with the white point of said second Gamut.

10 8. The color correction method according to claim 1, wherein said shifting step shifts said entered image data in a color space absent from said first and second apparatuses.

15 9. The color correction method according to claim 8, wherein said color space absent from said first and second apparatuses includes a Lab color space.

20 10. A color correction method of correcting image data prepared for a first apparatus having a first Gamut indicative of a range of reproducible colors so as to be applied to a second apparatus having a second Gamut indicative of a range of reproducible colors, said color correction method comprising the steps of:

25 entering image data prepared for said first apparatus,  
shifting said entered image data by a conversion of shifting a gray axis of said first Gamut towards a gray axis of said second Gamut,  
wherein said conversion is a conversion of shifting the gray axis of said first Gamut to a position not completely matching the gray axis of said second apparatus.

11. The color correction method according to claim 10, wherein said

shifting step shifts the gray axis of said first apparatus by the amount of shifting in a ratio of 0.5 to 0.9 with respect to the amount of shifting when the gray axis of said first Gamut matches the gray axis of said second Gamut.

5           12. The color correction method according to claim 10, wherein said shifting step sets a white point of said first Gamut to coincide with the white point of said second Gamut.

10           13. A computer program causing a computer to execute a color correction process of correcting image data prepared for a first apparatus having a first Gamut indicative of a range of reproducible colors so as to be applied to a second apparatus having a second Gamut indicative of a range of reproducible colors, said color correction process comprising the steps of:  
            receiving image data prepared for said first apparatus, and  
            shifting said received image data by a conversion of shifting a gray  
15           axis of said first Gamut towards a gray axis of said second Gamut,  
            wherein said image data is shifted according to an amount of shifting corresponding to a distance from the gray axis of said first Gamut in a chroma direction.

20           14. A computer program causing a computer to execute a color correction process of correcting image data prepared for a first apparatus having a first Gamut indicative of a range of reproducible colors so as to be applied to a second apparatus having a second Gamut indicative of a range of reproducible colors, said color correction process comprising the steps of:  
            receiving image data prepared for said first apparatus, and  
25           shifting said received image data by a conversion of shifting a gray axis of said first Gamut towards a gray axis of said second Gamut,  
            wherein said conversion is a conversion of shifting the gray axis of said first Gamut to a position not completely matching the gray axis of said second apparatus.

15. A color correction method of correcting image data prepared for a first apparatus having a first Gamut indicative of a range of reproducible colors so as to be applied to a second apparatus having a second Gamut indicative of a range of reproducible colors, said color correction method comprising the steps of:

entering image data located in said first Gamut,  
processing said entered image data using a predetermined technique so as to be applied to said second apparatus, and  
compressing image data that does not come into said second Gamut by said processing step using a predetermined technique so as to be located in said second Gamut such that color difference is minimized while maintaining lightness.

16. The color correction method according to claim 15, wherein said predetermined technique includes the step of shifting said entered image data by a conversion of shifting a gray axis of said first Gamut towards a gray axis of said second Gamut.

17. The color correction method according to claim 15, wherein said processing step compresses data in a color space with autonomous lightness.

18. The color correction method according to claim 17, wherein said color space with autonomous lightness is a Lab color space.

19. A computer program causing a computer to execute a color correction process of correcting image data prepared for a first apparatus having a first Gamut indicative of a range of reproducible colors so as to be applied to a second apparatus having a second Gamut indicative of a range of reproducible colors, said color correction process comprising the steps of:

receiving image data located in said first Gamut,  
processing said received image data using a predetermined technique so as to be applied to said second apparatus, and  
compressing image data that does not come into said second Gamut

by said processing step using a predetermined technique so as to be located in said second Gamut such that color difference is minimized while maintaining lightness.